

In the Claims:

Kindly cancel claims 1-6 and 8 without prejudice.

Kindly rewrite claims 7 and 9-21 as follows:

Cub  
D2  
C

7. (Twice Amended) A nucleic acid molecule that belongs to a set of nucleic acid molecules by means of which, in a process for the detection of representatives of *Salmonella enterica* subsp. *enterica*, *salamae*, *arizonae*, *diarizonae*, *houtenae*, *bongori* and *indica*, all the representatives of those subspecies can be detected, or nucleic acid molecule that can be used for such a set, wherein, in a region of at least 10 successive nucleotides of its nucleotide chain, the sequence of the nucleic acid molecule corresponds exactly to a sequence region of at least one representative of the *Salmonella enterica* subspecies, the sequence region "comprising" or being a phylogenetically conserved base sequence or a region of that base sequence, wherein in a region of at least 10 successive nucleotides of its nucleotide chain, it is 100% or at least 80% identical to a corresponding number of successive nucleotides of one or more of the following sequences or their complementary sequences:

SEQ ID NO: 1 ATGGATCAGAATACGCCCCG

SEQ ID NO: 2 ATGGATCAGAATACACCCCG

Seq ID NO: 3 CAGAATACGCCCCGTTTCGGC  
Seq ID NO: 4 CAGAATACACCCCGTTTCGGC  
Seq ID NO: 5 CAGAATACGCCCCGTTTCAGC  
Seq ID NO: 6 CAACCTAACTTCTGCGCCAG  
Seq ID NO: 7 CAACCTAACTTCTGCACCAG  
Seq ID NO: 8 CAACCTAACCTTCTGCGCCAG  
Seq ID NO: 9 CAACCTAACTTCTGCGGCAG  
Seq ID NO: 10 CAGCCTAACTTCTGCGCCAG.

9. (Twice Amended) The nucleic acid molecule which, in respect of its sequence, is homologous to a nucleic acid molecule according to claim 7 and, in at least 10 successive nucleotides of its nucleotide chain,

(i) is identical to a nucleic acid molecule according to claim 7, or

(ii) differs from a nucleic acid molecule according to claim 7 in not more than one nucleotide, or

(iii) differs from a nucleic acid molecule according to claim 7 in not more than two nucleotides.

10. (Twice Amended) The nucleic acid molecule according to claim 7, which is from 10 to 250 nucleotides long.

Sub E2

11. (Twice Amended) The nucleic acid molecule according to claim 7 is single-stranded or has a complementary strand.

Sub D5

12. (Twice Amended) The nucleic acid molecule according to claim 7, which is present

(i) as DNA, or

(ii) as RNA corresponding to (i), or

(iii) as PNA, the nucleic acid molecule where appropriate having been modified or labelled in a manner known per se for analytical detection processes.

Claim

13. (Amended) The nucleic acid molecule according to claim 12, which is a modified or labelled nucleic acid molecule in which up to 20% of the nucleotides of at least 10 successive nucleotides of its nucleotide chain are building blocks known per se as probes or primers.

14. (Twice Amended) The nucleic acid molecule according to claim 12, which is a modified or labelled or additionally modified or labelled nucleic acid molecule that comprises, in a manner known per se for analytical detection processes, one or more radioactive groups,

coloured groups, fluorescent groups, groups for immobilisation on a solid phase, groups for an indirect or direct reaction or other modifying or modified groups of nucleic-acid-like structure that are known *per se*.

15. (Twice Amended) A kit for analytical detection processes, for the detection of bacteria of the *Salmonella* genus, comprising one or more nucleic acid molecules according to claim 7.

*Claim 16*  
16. (Amended) The kit according to claim 15, wherein the set of nucleic acid molecules was produced synthetically and that it was produced in at least two separate synthesis batches.

17. (Amended) The kit according to claim 16, wherein the kit does not comprise any degenerate nucleic acid molecules.

*Sub D7*  
18. (Twice Amended) A method of detecting the presence or absence of a bacteria comprising the step of using a set of one or more nucleic acid molecules according to claim 7 or of a kit according to claim 15 to detect the

presence or absence of bacteria belonging to representatives of *Salmonella enterica* subspecies according to claim 7.

19. (Amended) The method according to claim 18, wherein a step selected from the group consisting of nucleic acid hybridization and nucleic acid amplification is carried out.

*C. Grant*  
*Sub D8*  
20. (Amended) The method according to claim 19, wherein a polymerase chain reaction (PCR) is carried out as nucleic acid amplification.

21. (Twice Amended) The method according to claim 18, wherein differences between the genomic DNA and/or RNA of the bacteria to be detected and of the bacteria that are not to be detected are determined at at least one nucleotide position in the region of a nucleic acid molecule according to claim 7 and representatives of a group of bacteria of the *Salmonella* genus are detected.

Kindly add new claims 22-27:

*C. Grant*  
*Sub D8*  
*cont*  
--22. (New) The nucleic acid molecule according to claim

sub D8  
cont

10, which is from 15 to 30 nucleotides long.

23. (New) The nucleic acid molecule according to claim 12, which is present

- (i) as DNA, or
- (ii) as RNA corresponding to (i), or
- (iii) as PNA, the nucleic acid molecule where appropriate having been modified or labelled in a manner known *per se* for analytical detection processes based on hybridisation and/or amplification.

3/8/81  
sub  
D9

24. (New) The nucleic acid molecule according to claim 13, which is a modified or labelled nucleic acid molecule in which up to 20% of the nucleotides of at least 10 successive nucleotides of its nucleotide chain are nucleotides that do not occur naturally in bacteria.

25. (New) The nucleic acid molecule according to claim 14 which is a modified or labelled or additionally modified or labelled nucleic acid molecule that comprises, in a manner known *per se* for analytical detection processes, one or more radioactive groups, coloured groups, fluorescent groups, groups for immobilisation on a solid

phase, groups for an indirect or direct enzyme reaction.

26. (New) The nucleic acid molecule according to claim 14 which is a modified or labelled or additionally modified or labelled nucleic acid molecule that comprises, in a manner known *per se* for analytical detection processes, one or more radioactive groups, coloured groups, fluorescent groups, groups for immobilisation on a solid phase, groups for an indirect or direct reaction using antibodies, antigens, enzymes or substances having an affinity for enzymes or enzyme complexes.

27. (New) The method according to claim 21, wherein representatives of *Salmonella enterica* subspecies according to claim 7 are detected.--

#### Remarks

Reconsideration of the application as amended is respectfully requested. Initially, claims 1-6 and 8 have been cancelled. Accordingly, the objection to claim 5 regarding its SEQ ID No. should be rendered moot. As to